



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: SYSTEM AND METHOD FOR ENCOURAGING COMPETITIVE PARTICIPATION IN AN AUCTION (54) Titre: SYSTEME ET PROCEDE POUR ENCOURAGER LA PARTICIPATION CONCURRENTIELLE A UNE VENTE AUX ENCHERES		
(57) Abstract		
<p>In both an on-line and a conventional auction, an auctioneer may encourage competitive bidding behavior through the provision of rewards to those bidders whose bids meet predetermined criteria. For example, a bidder may be rewarded if her bid exceeds a prior bid by a threshold value. An auctioneer may further discourage non-competitive bidding behavior by penalizing those bidders whose bids fall below predetermined standards.</p>		
(57) Abrégé		
<p>Dans une vente aux enchères aussi bien électronique que classique, un commissaire priseur peut encourager l'enchère concurrentielle en offrant une récompense aux enchérisseurs dont les enchères remplissent certaines conditions. Par exemple, un enchérisseur peut être récompensé si son enchère dépasse une enchère antérieure, d'une valeur seuil. Un commissaire-priseur peut également encourager l'enchère non-concurrentielle en pénalisant les enchérisseurs dont les enchères sont inférieures à des normes prédéterminées.</p>		

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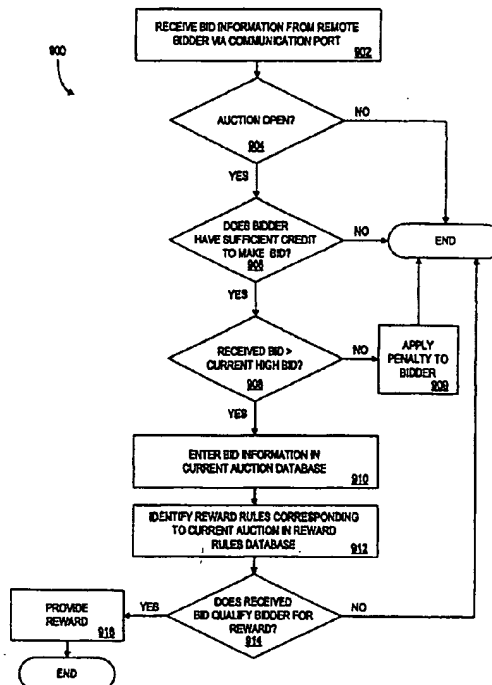
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<p>(21) International Application Number: PCT/US99/23901</p> <p>(22) International Filing Date: 14 October 1999 (14.10.99)</p> <p>(30) Priority Data: 09/223,901 31 December 1998 (31.12.98) US</p> <p>(71) Applicant (for all designated States except US): WALKER DIGITAL, LLC [US/US]; Five High Ridge Park, Stamford, CT 06905 (US).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): WALKER, Jay, S. [US/US]; 124 Spectacle Lane, Ridgefield, CT 06877 (US). VAN LUCHENE, Andrew, S. [US/US]; 9 Greenwood Place, Norwalk, CT 06854 (US). TEDESCO, Daniel, E. [US/US]; Apt. 6, 192 Park Street, New Canaan, CT 06840 (US).</p> <p>(74) Agents: SANTISI, Steve, M. et al.; Walker Digital Corporation, Intellectual Property Dept., One High Ridge Park, Stamford, CT 06905 (US).</p> <p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published With international search report.</p>		

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(57) Abstract

In both an on-line and a conventional auction, an auctioneer may encourage competitive bidding behavior through the provision of rewards to those bidders whose bids meet predetermined criteria. For example, a bidder may be rewarded if her bid exceeds a prior bid by a threshold value. An auctioneer may further discourage non-competitive bidding behavior by penalizing those bidders whose bids fall below predetermined standards.



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Description

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**SYSTEM AND METHOD FOR ENCOURAGING COMPETITIVE
PARTICIPATION IN AN AUCTION**

Cross-Reference to Related Applications

This application is related to co-pending U.S. patent application Serial No. 08/943,483 entitled "SYSTEM AND METHOD FOR FACILITATING ACCEPTANCE OF CONDITIONAL PURCHASE OFFERS (CPOs)" to Jay S. Walker, Daniel E. Tedesco, James A. Jorasch and Andrew S. Van Luchene filed on October 3, 1997, the entirety of which is incorporated herein by reference.

Field of the Invention

The present invention relates to auctions, and relates more particularly to systems and methods for rewarding or penalizing bidders whose bidding behavior during an auction session meets predetermined standards.

Background of the Invention

Auctioning has been an accepted method for selling products and services since the early 1700's. Since that time, traditional auctions have been conducted in auction houses where bidders would gather and compete face-to-face for the purchase of a particular item. Such traditional auctions typically offer luxury items or antiques, whose prices command a large profit. Thus, only those persons who can afford such "high ticket" items participate in traditional auctions. Also, since most auction houses are located in large cities such as London or New York, traditional auctions usually attract only those persons living near or having the means to travel to these auction houses. Such auctions are further limited to those people who are willing to pay the price of admission to the auction house.

With the development of world-wide communications systems, auctions have evolved to include bidding via telephone and video-conferencing, thus overcoming the

5 barrier imposed by travel. However, these auctions are still typically limited to high ticket items, thus attracting only a small proportion of the general public.

10 In recent years, and particularly with the advent of the Internet, auctioning has enjoyed increased attention and participation from the population at large. This is demonstrated by the success of such on-line Internet auctioning companies as EBAY and ONLINE.COM. These Internet auction companies allow for items of any value to be placed for bid on their web sites. Each item submitted for sale is assigned an auction session, which includes a starting time (or opening) and a closing time. Bids are then accepted electronically as long as the auction session is open. At the close of the auction session, the item is awarded to the highest bidder.

20 Although on-line auctioning has succeeded in attracting large-scale, daily participation in auctioning, the Internet environment has inadvertently eliminated some of the benefits enjoyed by traditional auctioning. For instance, the competitive bidding generated by face-to-face competition has been hampered, since on-line bidders usually are remotely located from each other. Furthermore, because the bidders in an on-line auction are not physically present at the auction site, they may not become instantly aware of higher bids submitted by other subsequent bidders. Another drawback to on-line auctioning is the frequent submission of unreasonably low bids during an auction session. These bids are typically submitted by bidders who are not serious about obtaining the item being auctioned or who anticipate that no reasonable bids will be submitted. Such bidding behavior is a waste of an auctioneer's resources, since such unreasonable bids are rarely accepted. However, since there is no face-to-face interaction among on-line bidders, there is little incentive for a bidder to refrain from submitting unreasonably low bids.

40 Thus, a need exists to encourage competitive bidding and to discourage unreasonable bid submissions in an on-line auction environment.

Summary of the Invention

45 30 Generally, according to the instant invention, systems and methods are disclosed for encouraging competitive bidding behavior during an auction session. Such systems and methods are advantageous in that they encourage competitive

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5 bidding by providing rewards to bidders whose bidding behavior meets predetermined criteria. Additionally, non-competitive bidding may be discouraged through the institution of penalties when bidding behavior falls below predetermined standards.

10 According to a first aspect of the present invention, a system and method for providing a reward to a bidder participating in an auction includes: identifying a product subject to bidding during an auction session; receiving a bid for the product from a bidder during the auction session; determining, based on a reward rule, whether the bidder is qualified to receive a reward; and if the bidder is qualified, transmitting, to the bidder, an indication that the bidder is qualified to receive the reward.

15 According to a second aspect of the present invention, a system and method for providing a penalty to a bidder participating in an auction includes: identifying a product subject to bidding during an auction session; receiving a bid for the product from a bidder during the auction session; determining, based on a penalty rule, whether the bidder is to receive a penalty; and if the bidder is to receive the penalty, transmitting, to the bidder, an indication that the bidder is to receive the penalty.

20 According to a third aspect of the present invention, a system and method for participating in an auction session includes: receiving an identification of a product subject to bidding during an auction session; transmitting a bid for the product to an auctioneer during the auction session; and receiving a reward in response to the bid.

25 According to a fourth aspect of the present invention, a system and method for participating in an auction session includes receiving an identification of a product subject to bidding during an auction session; transmitting a bid for the product to an auctioneer during the auction session; and receiving a penalty in response to the bid.

Further descriptions of the present invention are disclosed hereinbelow.

40 Brief Description of the Drawings

45 A more complete understanding of the present invention, as well as further features and advantages thereof, will be obtained by reference to the following detailed descriptions when read in conjunction with the accompanying figures, of which:

FIG. 1 is a block diagram illustrating a network over which an auction in accordance with the present invention may be conducted;

FIG. 2 is a block diagram illustrating the components of an auction server depicted in FIG. 1;

FIG. 3 depicts an exemplary auction inventory database stored in the auction server of FIG. 1;

FIG. 4 depicts an exemplary current auction database stored in the auction server of FIG. 1;

FIG. 5 is an exemplary bidder database stored in the auction server of FIG. 1;

FIG. 6 depicts an exemplary offer rules database stored in the auction server of FIG. 1;

FIG. 7 depicts an exemplary reward rules database stored in the auction server of FIG. 1;

FIG. 8 is a flowchart illustrating the steps performed by the auction server of FIG. 1 during an exemplary offer determination process of the present invention;

FIG. 9 is a flowchart illustrating the steps performed by the auction server of FIG. 1 in accordance with an exemplary reward process of the present invention; and

FIGS. 10A-10B are a flow chart illustrating the steps performed by the auction server of FIG. 1 in accordance with an exemplary multiple bidder reward process of the present invention.

Detailed Description of the Preferred Embodiments

Definitions

The following words shall be construed to have the following meanings within the context of the present disclosure:

Auction: a public sale, conducted live or through an electronic network such as a telecommunications system or the Internet, in which products or services are sold to the highest bidder.

Bidder: a participant in an auction.

Buyer: the winning bidder in an auction.

High Bid: the bid provided by a bidder which currently exceeds the value of all other submitted bids.

Greatest Bid: the high bid at the close of the auction

Bid Spread: the difference in pecuniary value between two submitted bids.

Preferred Embodiments

Referring now to FIG. 1, an on-line auction system 100 includes an auction server 102, a third party terminal 106, a payment processing server 108 and one or more bidder terminals 110, each connected through network 104. Auction server 102 is preferably operated by an on-line auctioneer, and may be any type of conventional computer or computing system that includes the components described below in reference to FIG. 2. Likewise, third party terminal 106, payment processor 108 and bidder terminals 110 may each be any conventional type of computer or computing system, such as an IBM personal computer or an IBM network server. Network 104 may be any type of network through which computers may communicate, such as a

5 local-area network (LAN), a wide-area network (WAN), an intranet system, a public telephone exchange system, the Internet or any combination thereof.

10 Third party terminal 106 is preferably operated by a party other than the auctioneer or a bidder. A third party, in the present disclosure, offers a reward to
5 qualified bidders participating in an auction held by the auctioneer, as discussed further below. Payment processor 108 is preferably operated by a financial clearinghouse, such as a credit card clearinghouse, which is equipped to process, inter alia, payments
15 from the bidder to the auctioneer. Bidder terminals 110 are preferably operated by one or more bidders participating in an auction conducted through auction server 102.

10 It is to be understood that in an embodiment where the present invention is practiced in other than an on-line auction system, auction server 102, third party terminal 106, payment processing server 108 and/or bidder terminals 110 may be replaced by their respective operating parties, described above. In such case, network
20 104 may not be necessary.

25 FIG. 2 displays the components of auction server 102. These components include processor 200, random access memory (RAM) 202, read-only memory (ROM) 204, clock 206, communication port 208 and data storage device 210. Data storage device 210 stores auction inventory database 212, current auction database 214, bidder database 216, offer rules database 218, reward rules database 220 and program 222,
30 discussed with reference to FIGS. 3-7 below.

35 Processor 200 may be any commonly manufactured microprocessor chip, such as the Pentium II® manufactured by Intel Corporation. Processor 200 runs at a clock speed (typically measured in megahertz (MHz)) determined by clock 206. Clock 206 may further be operative to measure the passage of time in order to calculate a current
40 25 time in which the auction server 102 is operating.

Processor 200 is operatively connected to random access memory (RAM) 202 and read-only memory (ROM) 204. RAM 202, which may be one or more single inline memory module (SIMM) chips capable of storing a predetermined amount of data
45 (typically measured in megabytes), is used by processor 200 for temporary storage of processing instructions during operation of auction server 102. Read-only memory (ROM) 204 is at least one permanent non-erasable and non-rewritable memory chip
30 that stores initializing instructions to be used by processor 200 during, for example, a
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5 start-up routine performed by auction server 102. Further functions of random access memory (RAM) 202 and read-only memory (ROM) 204 will be apparent to one of ordinary skill in the art.

10 Processor 200 is further operatively connected to communication port 208, which may be one or more of the following commonly known computer peripherals used for computer-related communications: a parallel port, a serial port, a network card, a fax/modem/telephone port and/or any combination of the same. Communication port 15 208 is operatively connected to transfer data between processor 200 and network 104.

Processor 200 is further operatively connected to data storage device 210, which 20 may be any one of the following commonly known computer peripherals used for storing computer data: a hard drive, a floppy disk drive, a DVD drive such as those manufactured by Phillips Electronics, a ZIP drive such as those manufactured by IOMEGA, a tape drive, a Digital Audio Tape drive and/or any combination of the same. Further such devices will be apparent to one of ordinary skill in the art. Data 25 storage device 210 may be further operative to store an operating system, one or more application programs, or a web site run off of auction server 102 each exemplified through program 222, in order to successfully operate auction server 102 in accordance with the system and method of the present invention.

30 FIG. 3 illustrates exemplary fields and data stored therein for auction inventory database 212. These exemplary fields include auction identification (ID) field 300, 20 auctioned item field 302, open time/date field 303, close time/date field 304 and minimum starting bid field 306. For each record (e.g. each row) of auction inventory database 212, auction ID field 300 lists an auction identifier assigned by the operator of auction server 102 to each auction to be conducted. The auction identifier may be any 35 alphabetic, numeric, alpha-numeric or other type of code, assigned so that each auction conducted on auction server 102 has a unique identifier. For example, the numbers "123" and "124" have been assigned to two such auctions, as listed in FIG. 3. The data in auction ID field 300 corresponds to similar data stored in auction ID field 400 and auction ID field 600 discussed below with reference to FIGS. 4 and 6, respectively.

40 Auctioned item field 302 contains, for each record of auction inventory database 212, a listing of the item that is to be placed for bidding in the auction identified by the corresponding auction identifier. The auctioned item may be a product or a service. 45 50 55

5 Products may be any tangible item of which the high bidder may take possession, for
example, an automobile, furniture, clothing, antiques and the like. Services may be
any intangible item to which the high bidder is entitled, such as a magazine
10 subscription or house cleaning services. In the example offered by FIG. 3, "product X"
5 is to be placed for bid in auction "123" and "product Y" is to be placed for bid in
auction "124."

15 Open time/date field 303 contains the date and time at which the corresponding
auction is to be opened for bidding. In the example offered by FIG. 3, auction "123" is
to be opened at 9:00AM on January 1, 1999. Likewise, close time/date field 304
20 contains the date and time at which the corresponding auction is to be closed (e.g. when
no further bids will be accepted). In the example offered by FIG. 3, auction "124" is to
be closed at 12:00 PM on January 1, 1999. In one embodiment of the present
invention, the data stored in close time/date field 304 for a particular auction may be
25 changed based on the submission of a request and, preferably, a payment by a bidder to
15 either extend the auction past the listed closing time or to close the auction early. The
payment amount may be determined by the auctioneer, or may be subject to a parallel
auction in which one or more bidders bid for a price for which the original auction will
be closed.

30 Minimum starting bid field 306 contains, for each record, data corresponding to
20 the minimum value that will be accepted for an auctioned item. For example, in
auction "123," the minimum bid that will be accepted for "product X" is \$125.00

35 FIG. 4 illustrates exemplary fields and the data stored therein for current auction
database 214. Each record in current auction database 214 corresponds to a bid
submitted by a bidder during an auction. The exemplary fields of this database include
40 25 auction identification (ID) field 400, bidder identification (ID) field 402, bid amount
field 404 and time received field 406. Auction ID field 400 contains data
corresponding to the data stored in auction ID field 300. In the present example, only
data for current auction number "123" is displayed. However, current auction database
45 214 may contain data for one or more previous auctions and/or one or more auctions
30 conducted simultaneously. In the alternative, there may be one or more such current
auction databases stored in data storage device 120, each containing archived, historical

5 data corresponding to a previous auction or current data corresponding to a current auction.

10 Bidder identification (ID) field 402 contains, for each record, a unique code corresponding to a bidder participating in a corresponding auction. The bidder
5 identification code may be any alphabetic, numeric, alpha-numeric or other type of code, assigned by the auctioneer so that each bidder participating in an auction on auction server 102 has a unique identifier. In the present example, one bidder
15 participating in auction "123" has the bidder identification "MALWG018," as displayed in the first record of current auction database 214. Each code stored in bidder
10 ID field 402 corresponds to a similar code stored in bidder identification (ID) field 500 of bidder database 216, discussed in conjunction with FIG. 5 below.

20 Bid amount field 404 lists the currency value submitted as a bid by a bidder for an auctioned item. For example, the first record of auction database 214 shows that for auction number "123" bidder MALWG018B submitted a bid of \$450.00 for "product
25 X."

15 Likewise, time received field 406 lists the date and time at which a bid was submitted. The data in time received field 406 may be recorded by auction server 102
30 as the bid is received after being transmitted by bidder terminal 110 over network 104. Alternatively, the time and date information may be encrypted by the bidder and
20 transmitted along with the bid to auction server 102. In this manner, if there is a network disruption or if auction server 102 temporarily stops operating, the bid may
35 still be accepted based on the encrypted date and time, even if the bid was actually received after the scheduled closing time. Upon receipt of the encrypted information, auction server 102 may containing processing instructions in program 222 to decrypt
40 the encrypted information prior to storage in database 214. Schemes used for encrypting and decrypting are well-known to one of ordinary skill in the art. See, for example, Bruce Schneier, Applied Cryptography: Protocols, Algorithms, and Source Code in C (2d Ed., John Wiley & Sons, Inc., 1996).

45 FIG. 5 illustrates exemplary fields and the data stored therein for bidder database 216. Bidder database 216 generally stores data specific to each bidder
30 registered to participate in an auction conducted on auction server 102. The exemplary fields of this database include bidder identification (ID) field 500, historic participation
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level field 502, bidder name field 504, financial account identifier field 506 and contact information field 508.

Bidder identification (ID) field 500 preferably contains a unique identifier for each bidder that has registered to participate in auctions conducted on auction server 102. The data stored in bidder ID field 500 is further preferably assigned by the operator of auction server 102 to uniquely identify each individual that has registered to submit bids. Alternatively, the bidder identifier may be determined by the bidder. The data may be any alphabetic, numeric, alpha-numeric or other code as discussed above with regard to bidder ID field 402.

Historic participation level field 502 contains a value determined by auction server 102 or an operator of auction server 102. This value acts as a rating for the bidder. The value may be determined from the bidder's previous bidding activities on auction server 102. For example, the value may correspond to the number of previous auctions in which the bidder submitted a greatest bid, the number of previous auctions in which the bidder submitted a competitive bid or some combination of the two. Other factors may be used to determine the values historic participation level field 502.

Bidder name field 504 contains the name of the bidder corresponding to the bidder identifier. In the present example, the first record of bidder database 216 indicates the "John Doe" has been assigned bidder identifier DOEQ29J.

Financial account identifier field 506 contains data corresponding to a financial account number, such as a credit card account number or a checking account number, from which a value of a bid submitted by the bidder is to be deducted. In the present example, the first record of bidder database 216 indicates that John Doe owns an account corresponding to financial account identifier number 1234-1234-1234-1234. Other data, such as a bank or credit card company identifier and an expiration date of the financial account may be included in this field, or may be stored in another field (not shown). The information stored in financial account identifier field 506 may further be used to credit a reward given to the bidder or to deduct a penalty charged to a bidder, discussed further below.

Contact information field 508 contains data preferably corresponding to a post office address for each bidder. The data may contain the bidders street address and city and state of residence. This information may be used as a delivery address for an

5 auctioned item that a bidder has won. It may be further used in processing a transaction
with a financial institution holding the financial account indicated in financial account
10 identifier field 206. The transaction is preferably processed by auction server 102 in
communication with payment processing server 108. Other data, such as a bidder's
5 telephone number or e-mail address may be stored in contact information field 508 or
in another field (not shown).

15 FIG. 6 illustrates exemplary fields and the data stored therein for offer rules
database 218. Offer rules database 218 contains data accessed by auction server 102
during an auction to determine when a reward offer should be made to a bidder. The
10 exemplary fields of this database include auction identification (ID) field 600, required
conditions field 602, offer message field 604, offer recipient rules field 606 and Reward
20 ID field 608.

Auction identification (ID) field 600 contains data corresponding to an auction
25 identifier for an auction conducted on auction server 102. The auction identifier is
15 determined as discussed above with respect to auction ID field 300 and auction ID field
400.

30 Required conditions field 602 contains, for each record, one or more conditions
that must be met in order for a reward offer to be made to a bidder who submitted a bid
during an auction. As indicated in FIG. 6, such conditions may require, for example,
20 that (i) no bid has been received during a current auction for over 30 minutes, (ii) the
high bid in a current auction is less than \$300.00 after the third hour of such auction
35 and/or (iii) the high bid submitted during a current auction is less than \$450.00. Other
such conditions in which offers are made to bidders in order to encourage competitive
bidding may be determined by the auctioneer and stored in required conditions field
25 602.

40 Offer message field 604 contains data corresponding to text that will be
transmitted to a qualified bidder participating in a current auction if the corresponding
condition is met. The text preferably lists the reward to be given during the current
45 offer and the action the bidder must take to earn the reward.

30 Offer recipient rules field 606 lists the bidders to whom the offer message in
corresponding offer message field 604 will be transmitted if the corresponding

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5 condition is met. The offer recipient rules may be established by the auctioneer, the owner of the auctioned product or a third party who is offering the reward.

10 Reward identifier field 608 contains a reward identifier corresponding to a reward to be given to a bidder if the bidder accepts the offer for the reward. The data in
5 reward identifier field 608 is established in a similar fashion to the data stored in reward identifier field 700, discussed below with regard to FIG. 7.

15 FIG. 7 illustrates exemplary fields and the data stored therein for reward rules database 220. Reward rules database 220 contains data accessed by auction server 102 during an auction to determine when a reward should be provided to a bidder. The
10 exemplary fields of this database include reward identifier field 700, reward supplier field 702, reward description field 704 and reward rules field 706.

20 Reward identifier field 700 contains a reward identifier corresponding to a reward to be given to a bidder for a bid submitted during an auction. The reward identifier may be any alphabetic, numeric, alphanumeric, or other code which
25 preferably is uniquely assigned 102 to each category of rewards by the auctioneer or auction server.

30 Reward supplier field 702 lists, for each reward identifier, the party who is supplying the reward. Typically the reward may be supplied by the auctioneer. However, in one embodiment of the present invention, the reward supplier may be a
20 third party, such as a credit card company, who may supply the reward automatically if the bidder agrees to file a credit card application with the company. In such an
35 embodiment, the third party may first check the credit history of the bidder using information supplied by auction server 102 from bidder database 216 before making the offer. Examples of other third parties include (i) a telecommunications company who
40 may offer to supplement the pecuniary value of a bidder's bid if the bidder agrees to switch her long distance telecommunications carrier to the third party or (ii) an insurance company who may offer a reward to a bidder if the bidder agrees to purchase insurance from the company. Rewards supplied by third parties may include a value of
45 currency, a supplement to the bid, a rebate on the product, an amount of frequent flier miles, a second product, a warranty for the product, free shipment of the product if the
30 bid is the greatest bid, and the like. A supplement to the bid is an amount by which a bid is increased. For example, if a bid is for \$50.00, and a supplement to that bid is

5 \$5.00, then the bid is increased to \$55.00 with the supplement. The rewards offered by third parties may further be conditioned upon the bidder submitting the greatest bid.

10 Reward description field 704 contains a description of the reward to be given to a bidder. The reward may be any product, service or currency amount that the reward
5 supplier sees fit to offer the bidder.

15 Reward rules field 706 contains a description of the one or more rules that must be met before a bidder may automatically receive the reward. These rules are preferably established by the auctioneer, but may be established by the reward supplier or the owner of the auctioned product if different than the auctioneer. Once the rules
20 have been met, the bidder will receive notification that he has earned the reward.

20 In addition, reward rules field 706 may further contain one or more rules in which a penalty will be assessed against a bidder. The penalty is provided in order to discourage non-competitive bidding behavior. An example of a rule in which a penalty will be provided is where the bidder submits a bid that is less than the minimum
25 starting bid listed in minimum starting bid field 306 for the auction. Another example is where a bidder submits a bid that is lower than a previously submitted bid. Other examples will be apparent to one of ordinary skill in the art. Examples of penalties include, barring the bidder from submitting bids for a particular auction or for a
30 predetermined amount of time, limiting the number of bids the bidder may submit, or charging the bidder's financial account for a predetermined currency amount.
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35 Turning now to FIG. 8, reward offering process 800 is continuously performed during a given auction session by processor 200 in conjunction with processing instructions stored in program 222 of data storage device 210. Process 800 is further performed for each auction listed in auction ID field 600 that is conducted on auction
40 server 102. Process 800 begins at step 802 where processor 200 is programmed to retrieve the required auction conditions listed in field 602 of database 218 for a current auction. At step 804, processor 200 retrieves the current auction data stored in fields 404 and 406 of current auction database 214. At step 806, processor 200 correlates the
45 retrieved data and compares it to the required auction conditions. If the current auction data satisfies the required auction conditions, process 800 continues to step 808. Otherwise process 800 ends and is reset to step 802.
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5 At step 808, processor 200 retrieves from offer recipient rules field 606 each
offer recipient rule stored for the subject auction and for which the required conditions
have been satisfied. At step 810, processor 200 determines, based on the retrieved rules,
10 which of the bidders participating in the subject auction are to receive the
5 corresponding offer message stored in offer message field 604. At step 812, the
qualified bidders contact information and/or financial account identifier is retrieved by
processor 200 from bidder database 216 when this information is necessary to send the
15 offered reward to the bidder. At step 814, the corresponding offer message stored in
offer message field 604 is transmitted to the qualified bidders from communication port
10 208 over network 104 to the qualified bidders terminals 110.

20 At step 816, processor 200 determines whether the offer was accepted by a
bidder. If the offer is not accepted, process 800 ends and is reset to step 802. If the
offer is accepted by a bidder, then at step 818, the reward is assigned to the bidder and
is, for example, sent to the bidder's address, added to the bidder's next bid or credited
25 to the bidder's financial account, depending on the type of reward. Process 800 then
15 ends and is reset to step 802.

 Referring now to FIG. 9, a single bidder reward process 900 is continuously
30 performed during a given auction session by processor 200 in conjunction with
processing instructions stored in program 222 of data storage device 210. Process 900
20 may be performed during any or all auctions, as determined by the auctioneer to be
appropriate.

35 Process 900 begins at step 902 when a bid is received from a bidder terminal
110, transmitted over network 104 and received via communication port 208. As
described above, the bid information may contain a current auction identifier, the
40 bidder identifier, a pecuniary value of the bid and, optionally, an encrypted date and
time at which the bidder transmitted this information. After the bid information is
stored in current auction database 214, the process continues to step 904 where
processor 200 determines whether the auction for which the bid is submitted is open.
45 This is accomplished by referencing the time stored from signals received from clock
206 and comparing the current time to the times stored in open date/time field 303 and
close date/time field 304. If the auction is open the process continues to step 906,
30 otherwise process 900 ends and is reset to step 902.

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5 At step 906, processor 200 determines whether the bidder submitting the bid has
sufficient funds or credit to pay the currency value of the bid. This is accomplished by
10 retrieving the financial account identifier stored in field 506 which corresponds to the
bidder identifier. Processor 200 then communicates with payment processing server
5 108 through communication port 208 and over network 104 to determine whether the
financial account has sufficient funds to cover the bid amount. If the bidder has
15 sufficient funds or credit, process 900 continues to step 908. Otherwise, process 900
ends and is reset to step 902. In an alternate embodiment, step 906 may be deferred
until after the close of the auction. Other methods for determining whether the bidder
10 has sufficient funds will be understood by those skilled in the art.

20 At step 908, processor 200 determines, in accordance with at least one
exemplary reward rule, whether the received bid is greater than the current high bid.
Those skilled in the art will understand that the following illustrated method is likewise
applicable to other types of reward rules. The determination is accomplished by
25 15 retrieving all the bid values stored in bid amount field 404 of current auction database
214 and comparing them to the received bid. If the received bid is less than the current
high bid, process 900 optionally continues to step 909 where a penalty may be applied
against the bidder, after which process 900 ends and is reset to step 902. If, however,
30 the received bid is greater than the current high bid, then the exemplary reward rule has
20 been met and process 900 continues to step 910.

35 It should be apparent to one of ordinary skill in the art that various additional or
substitute reward rules may be applied at step 908. For example, instead of a reward
rule that requires that the received bid is greater than a current high bid, the auctioneer
may provide for such alternate reward rules as: (i) the bidder submits a bid within a
40 25 predetermined time from the submission of a previous bid, (ii) the bidder must submit
greater than a predetermined number of increasing bids during the course of the auction
(e.g. each of the bidder's bids is greater than the former), (iii) the bidder's bid must be
greater than any previous bid by at least a predetermined bid spread, (iv) the greatest
45 bid for the auction must be greater than \$500.00, (v) the bidder must have participated
30 in greater than a predetermined number of previous auctions, (vi) the bid is submitted
after a predetermined amount of time from a previous bid, (vii) random bidders may be

5 selected to receive a reward. Other such conditions will be apparent and are contemplated to be within the scope of the present invention.

10 At step 910, the bid information is stored in the appropriate fields of current auction database 214. Then, at step 912, processor 200 retrieves the reward rules
5 corresponding to the current auction as stored in reward rules field 706 of reward rules database 220. At step 914, processor 200 compares the received bid to the reward rules to determine if the bidder is qualified to receive a reward based on her bid. If so,
15 process 900 continues to step 916 where the reward is provided to the bidder, after which process 900 ends and is reset to step 902. If not, process 900 is likewise ended
10 and reset to step 902.

20 Referring now to FIGS. 10A-10B, a multiple bidder reward process 1000 is performed by processor 200 in conjunction with processing instructions stored in program 222 of data storage device 210. Process 1000 may be performed during any or all auctions as determined by the auctioneer to be appropriate.

25 Process 1000 begins at step 1002 when a bid is received from a bidder terminal, transmitted over network 104 and received via communication port 208. As described above, the bid information may contain a current auction identifier, the bidder
30 identifier, a pecuniary value of the bid and, optionally, an encrypted date and time at which the bidder transmitted this information. After the bid information is stored in
20 current auction database 214, the process continues to step 1004 where processor 200 determines whether the auction for which the bid is submitted is open. This is
35 accomplished by referencing the current time determined from signals received from clock 206 and comparing the current time to the times stored in open date/time field 303 and close date/time field 304. If the auction is open the process continues to step
25 1006, otherwise process 1000 ends and is reset to step 1002.

40 At step 1006, processor 200 determines whether the bidder submitting the bid has sufficient funds or credit to pay the currency value of the bid. This is accomplished by retrieving the financial account identifier stored in field 506 which corresponds to
45 the bidder identifier. Processor 200 then communicates with payment processing
30 server 108 through communication port 208 and over network 104 to determine whether the financial account has sufficient funds to cover the bid amount. If the bidder

5 has sufficient funds or credit, process 1000 continues to step 1008. Otherwise, process 1000 ends and is reset to step 1002.

10 At step 1008, processor 200 determines, in accordance with an exemplary reward rule, whether the received bid is greater than the current high bid. This is
5 accomplished by retrieving all the bid values stored in bid amount field 404 of current auction database 214 and comparing them to the received bid. If the received bid is
15 less than or equal to the current high bid, process 1000 continues to step 1009 where a penalty may be assessed against the bidder, after which process 1000 ends and is reset to step 1002. If, however, the received bid is greater than the current high bid, process
10 1000 continues to step 1010.

20 As discussed above with regard to step 908, the reward rule employed at step 1008 is merely exemplary. Additional or alternate reward rules may be employed.

25 At step 1010, the bid information is stored in the appropriate fields of current auction database 214. Processor 200 then compares the bid against the reward rules
15 stored in reward rules field 706 of reward rules database 220. If the bid satisfies the conditions of one or more of the reward rules, the bidder is given the reward at step 1012, and process 1000 continues to step 1014.

30 At step 1014, a bid from a second (or subsequent) bidder terminal is transmitted over network 104 and received via communication port 208. As described above, the
20 bid information may contain a current auction identifier, the bidder identifier, a pecuniary value of the bid and, optionally, an encrypted date and time at which the bidder transmitted this information. After the bid information is stored in current
35 auction database 214, the process continues to step 1016 where processor 200 determines whether the auction for which the bid is submitted is open. This is
40 accomplished by referencing the current time determined from signals received from clock 206 and comparing the current time to the times stored in open date/time field 303 and close date/time field 304. If the auction is open the process continues to step 1018, otherwise process 1000 ends and is reset to step 1002.

45 At step 1018, processor 200 determines whether the second bidder submitting
30 the second bid has sufficient funds or credit to pay the currency value of the bid. This is accomplished by retrieving the financial account identifier stored in field 506 which corresponds to the second bidder identifier. Processor 200 then communicates with
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5 payment processing server 108 through communication port 208 and over network 104
to determine whether the financial account has sufficient funds to cover the bid amount.
If the second bidder has sufficient funds or credit, process 1000 continues to step 1020.
10 Otherwise, process 1000 ends and is reset to step 1002.

5 At step 1020, processor 200 determines, based on an exemplary reward rule,
whether the second received bid is greater than the current high bid. This is
accomplished by retrieving all the bid values stored in bid amount field 404 of current
15 auction database 214 and comparing them to the second received bid. If the second
received bid is less than or equal to the current high bid, process 1000 continues to step
10 1021 where a penalty may be assessed against the second bidder, after which process
1000 ends and is reset to step 1002. If, however, the second received bid is greater than
20 the current high bid, process 1000 continues to step 1022.

As discussed above with regard to steps 908 and 1008, the reward rule
employed at step 1020 is merely exemplary. Additional or alternate reward rules may
25 be employed.

At step 1022, the bid information is stored in the appropriate fields of current
auction database 214. Processor 200 also retrieves corresponding reward rules from
30 reward rules database 220. At step 1024, processor 200 then compares the second bid
against the retrieved reward rules. If the second bid does not satisfy the reward rules,
20 process 1000 ends and is reset to step 1002. However, if the second bid satisfies the
conditions of one or more of the reward rules, the bidder is given the reward at step
35 1026, after which process 1000 ends. In an alternate embodiment, the reward assigned
to the first bidder may be revoked as part of step 1026.

While the best mode contemplated for carrying out the invention has been
40 25 described in detail in the foregoing, those of ordinary skill in the art to which the instant
invention relates will recognize various alternative designs and embodiments for
practicing the invention. In particular, the methods and systems disclosed above,
though discussed in terms of an on-line embodiment, are equally applicable to enhance
45 competitive bidding in any conventional form of auctioning. Furthermore, the
30 databases and data stored therein may be rearranged or combined into equivalent
structures. Finally, it is to be understood that a reward may be provided during a
current auction or may be awarded subsequent to the current auction. Accordingly, it is
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to be understood that the foregoing description is provided for illustrative purposes only
and does not limit the scope of the instant invention, as defined by the appended claims.

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Claims

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We claim:

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1. A method for providing a reward to a bidder participating in an auction, the method comprising:

identifying a product subject to bidding during an auction session;

receiving a bid for the product from a bidder during the auction session;

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5 determining, based on a reward rule, whether the bidder is qualified to receive a reward, and if the bidder is qualified:

transmitting, to the bidder, an indication that the bidder is qualified to receive the reward.

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2. The method of claim 1, further comprising:

10 determining, based on the bid, whether the bidder is qualified to receive the product; and if the bidder is qualified:

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transmitting to the bidder, an indication that the bidder is qualified to receive the product.

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15 3. The method of claim 2, wherein the step of determining, based on the bid, whether the bidder is qualified to receive the product, further comprises:

determining whether the bid is greater than each of a plurality of remaining bids.

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4. The method of claim 1, wherein the reward comprises at least one of:

a value of currency, a supplement to the bid, a rebate on the product, an amount

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20 of frequent flier miles, a second product, and a warranty for the product.

5. The method of claim 1, wherein the reward rule comprises a condition that the bidder accept an offer provided by a third party.

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6. The method of claim 5, further comprising:

transmitting, before the determining step, an offer to the bidder for a second

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25 product provided by the third party;

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- 5 receiving an acceptance of the offer from the bidder; whereby the bidder is qualified to receive the reward.

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7. The method of claim 6, wherein the second product is a service.

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8. The method of claim 7, wherein the service is a credit card account and wherein the third party is a credit card provider.

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- 10 9. The method of claim 6, wherein the reward is a supplement to the bid, the supplement including a value of currency.

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10. The method of claim 5, further comprising:
determining whether the bidder has an acceptable credit history before the offer is transmitted to the bidder.

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- 15 11. The method of claim 1, further comprising:
receiving at least one bid for the product from each of a plurality of remaining bidders.

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12. The method of claim 11, wherein the step of receiving at least one bid is performed prior to the step of receiving the bid.

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- 20 13. The method of claim 12, wherein the reward includes a condition that the bid from the bidder is greater than each bid received from the plurality of remaining bidders.

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14. The method of claim 12, further comprising:
determining which of the at least one bids is a greatest bid.

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- 25 15. The method of claim 14, wherein the reward rule comprises a condition that the bid from the bidder is greater than the greatest bid by a predetermined percentage.

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5 16. The method of claim 14, wherein the reward rule comprises a condition that the
bid from the bidder is greater than the greatest bid by a predetermined currency value.

10 17. The method of claim 1, wherein the reward rule comprises a condition that the
bid is a first received bid.

15 18. The method of claim 17, wherein the reward is a currency value corresponding
to a value of the bid.

20 19. The method of claim 17, wherein the reward corresponds to a difference
between the bid and a greatest bid.

25 20. The method of claim 1, in which the establishing step comprises:
establishing the reward rule to include a condition that a greatest bid is at least
equal to a predetermined value; and the method further comprising:
receiving a second bid for the product from a second bidder, wherein the
second bid is the greatest bid; and
determining whether the greatest bid is at least equal to the
predetermined value, whereby if the greatest bid is at least equal to the predetermined
value, the bidder is qualified to receive the reward.

35 21. The method of claim 20, wherein the step of determining, based on the
reward rule further comprises:
determining, based on the reward rule, whether the second bidder is
qualified to receive a reward; and if the second bidder is qualified:
transmitting, to the second bidder, an indication that the second bidder is
qualified to receive the reward, whereby if the greatest bid is at least equal to the
predetermined value, the second bidder is qualified to receive the reward.

45 22. The method of claim 1, in which the establishing step further comprises:
establishing the reward rule including a condition that the bid exceed a prior
bid, the method further comprising:

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5 29. The method of claim 28, wherein the predetermined value corresponds to a percentage of the prior bid.

10 30. The method of claim 1, in which the establishing step further comprises:
establishing the reward rule including a condition that the bidder submits a predetermined number of bids, the method further comprising:
15 receiving at least one prior bid from the bidder; and wherein the determining step further comprises:
determining whether a number of bids from the bidder, including the bid and the at least one prior bid, is at least equal to the predetermined number of bids,
20 whereby if the number of bids is at least equal to the predetermined number of bids, the bidder is qualified to receive the reward.

25 31. The method of claim 1, in which the establishing step further comprises:
establishing the reward rule including a condition that a bidder submit at least two bids within a predetermined amount of time; the method further comprising:
receiving a second bid from the bidder; and wherein the determining
30 step further comprises:
determining whether the bid and the second bid were received within the predetermined amount of time.

35 32. The method of claim 1, further comprising:
measuring a time between the bid and a previous bid from a second bidder; and
25 in which the establishing step further comprises:
establishing the reward rule including a condition that the bidder is qualified to receive the reward when the time is greater than a predetermined value; and wherein the determining step further comprises:
40 determining whether the time between the bid and the previous bid is greater than the predetermined value.

45 33. The method of claim 1, further comprising:

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5 5 measuring a time between the bid and a previous bid from a second bidder; and
in which the establishing step further comprises:

 establishing the reward rule including a condition that the bidder is qualified to
10 receive the reward when the time is greater than a predetermined value; and wherein
the determining step further comprises:

10 determining whether the time between the bid and the previous bid is
less than the predetermined value.

15 34. The method of claim 1, in which the establishing step further comprises:
 establishing a reward rule that a historic participation of the bidder meets a
20 predefined criterion; and wherein the determining step further comprises:

15 measuring the historic participation of the bidder; and
 determining whether the historic participation meets the
predefined criterion.

25 35. The method of claim 34, wherein the predefined criterion includes a
requirement that the bidder has participated in at least one previous auction session.

30 20 36. The method of claim 34, wherein the historic participation corresponds to at
least one of: a number of previous auctions in which the bidder participated, a number
of previous auctions which the bidder won, and an amount of profit earned from the
35 bidder.

 37. The method of claim 1, further comprising:
40 25 receiving personal data from the bidder including at least one of a name, an
address and a financial account identifier belonging to the bidder.

 38. The method of claim 37, further comprising:
45 verifying the personal data with a third party.

 39. The method of claim 1, wherein the receiving step includes:

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5 receiving the bid from the bidder over one of a telecommunications network and the Internet.

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40. The method of claim 1, wherein the product is a service.

41. The method of claim 1, further comprising:
providing the reward to the bidder.

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10 42. The method of claim 1, further comprising:
receiving, from the bidder, a payment to close the auction session.

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43. The method of claim 42, wherein the payment is determined from a parallel auction.

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15 44. The method of claim 1, further comprising:
receiving, from the bidder, a payment to extend the auction session.

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45. The method of claim 44, wherein the payment is determined from a parallel auction.

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46. The method of claim 1, further comprising:
terminating the reward if a higher bid is received from a second bidder.

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20 47. The method of claim 1, wherein the reward rule includes a condition that the reward be issued randomly.

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48. The method of claim 1, wherein the reward to be offered is determined based on at least one of:
the bidder's participation history, the bid spread, the product, a statistical
25 likelihood that the bid will be a greatest bid, and the average highest bid historically submitted for a similar product.

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- 5 49. The method of claim 1, wherein the receiving step includes:
receiving an encrypted indication of a time the bid was transmitted.

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50. A method for providing a penalty to a bidder participating in an auction, the
method comprising:

identifying a product subject to bidding during an auction session;

- 10 receiving a bid for the product from a bidder during the auction session;

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determining, based on a penalty rule, whether the bidder is to receive a penalty;

and if the bidder is to receive the penalty:

transmitting, to the bidder, an indication that the bidder is to receive the
penalty.

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- 15 51. The method of claim 50, wherein the penalty rule comprises a condition that the
bid is less than a current high bid.

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52. The method of claim 50, wherein the penalty comprises making the bidder
ineligible to continue participating in the auction session.

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53. The method of claim 50, wherein the penalty rule comprises a condition that the
20 bid is less than a predetermined value.

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54. A method for participating in an auction session, comprising:
receiving an identification of a product subject to bidding during an auction
session;

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transmitting a bid for the product to an auctioneer during the auction session;

- 25 and

receiving a reward in response to the bid.

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55. The method of claim 54, further comprising:
receiving the product in response to the bid.

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56. The method of claim 54, wherein the product is a service.

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- 5 57. The method of claim 54, wherein the transmitting step is conducted over one of
a telecommunications network and the Internet.
- 10 58. The method of claim 54, wherein the transmitting step includes:
transmitting the bid with an encrypted indication of a time the bid was
transmitted.
- 15 59. A method for participating in an auction session, comprising:
receiving an identification of a product subject to bidding during an auction
session;
20 transmitting a bid for the product to an auctioneer during the auction session;
and
15 receiving a penalty in response to the bid.
- 25 60. A computer data signal embodied in a carrier wave comprising a segment
having computer processing instructions for notifying a bidder that the bidder is
qualified to receive a reward in response to a previous bid submitted during an auction
30 session.
- 20 61. An apparatus for providing a reward to a bidder participating in an auction,
comprising:
35 means for identifying a product subject to bidding during an auction session;
means for receiving a bid for the product from a bidder during the auction
session;
25 means for determining, based on a reward rule, whether the bidder is qualified
40 to receive a reward, and
means for transmitting, to the bidder, an indication that the bidder is qualified to
receive the reward.
- 45 62. An apparatus for providing a reward to a bidder participating in an auction,
30 comprising:
a storage device; and
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5 a processor connected to the storage device,
the storage device storing a program for controlling the processor; and
the processor operative with the program to:
10 identify a product subject to bidding during an auction session;
receive a bid for the product from a bidder during the auction session;
10 determine, based on a reward rule, whether the bidder is qualified to
receive a reward, and if the bidder is qualified:
15 transmit, to the bidder, an indication that the bidder is qualified to
receive the reward.

20 63. A computer readable medium encoded with processing instructions for
15 implementing a method for providing a reward to a bidder participating in an auction,
the method comprising:
identifying a product subject to bidding during an auction session;
25 receiving a bid for the product from a bidder during the auction session;
determining, based on a reward rule, whether the bidder is qualified to receive a
20 reward, and if the bidder is qualified:
30 transmitting, to the bidder, an indication that the bidder is qualified to
receive the reward.

35 64. An apparatus for providing a penalty to a bidder participating in an auction,
comprising:
25 means for identifying a product subject to bidding during an auction session;
means for receiving a bid for the product from a bidder during the auction
40 session;
means for determining, based on a penalty rule, whether the bidder is to receive
a penalty; and
30 means for transmitting, to the bidder, an indication that the bidder is to receive
45 the penalty.

50 65. An apparatus for providing a penalty to a bidder participating in an auction,
comprising:

- 5 5 a storage device; and
a processor connected to the storage device,
the storage device storing a program for controlling the processor; and
10 the processor operative with the program to:
 identify a product subject to bidding during an auction session;
10 receive a bid for the product from a bidder during the auction session;
 determine, based on a penalty rule, whether the bidder is to receive a
15 penalty; and if the bidder is to receive the penalty:
 transmit, to the bidder, an indication that the bidder is to receive the
penalty.
- 20 15 66. A computer readable medium encoded with processing instructions for
implementing a method for providing a penalty to a bidder participating in an auction,
the method comprising:
25 identifying a product subject to bidding during an auction session;
 receiving a bid for the product from a bidder during the auction session;
20 determining, based on a penalty rule, whether the bidder is to receive a penalty;
and if the bidder is to receive the penalty:
30 transmitting, to the bidder, an indication that the bidder is to receive the
penalty

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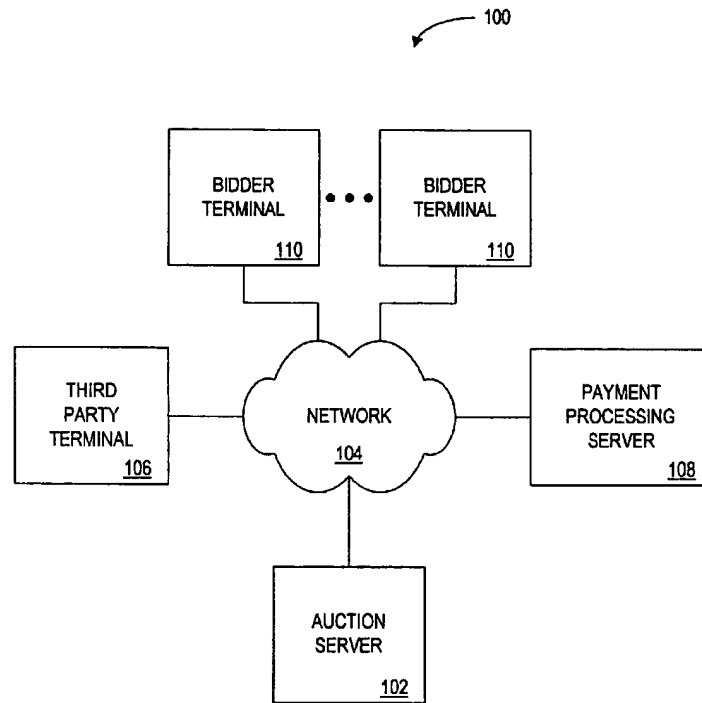


FIG. 1

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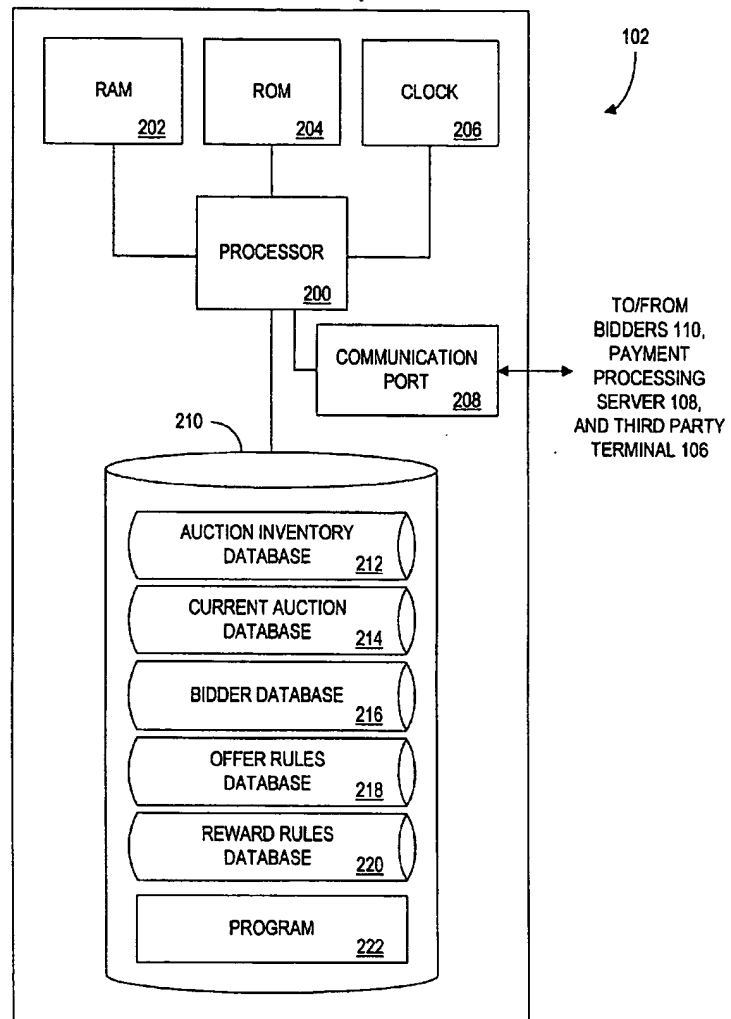


FIG. 2

212 ↗

AUCTION ID	AUCTIONED ITEM	OPEN TIME/DATE	CLOSE TIME/DATE	MINIMUM STARTING BID
123	PRODUCT X	9:00 AM 1/1/99	12:00 PM 1/1/99	\$125.00
124	PRODUCT Y	12:00 AM 1/1/99	12:00 PM 1/1/99	\$50.00

FIG. 3

214

AUCTION ID 400	BIDDER ID 402	BID AMOUNT 404	TIME RECEIVED 406
123	MALWG01B	\$450.00	11:36 AM 1/1/99
123	STEZD12K	\$445.00	11:35 AM 1/1/99
123	MCDT98R	\$430.00	11:20 AM 1/1/99
123	SMIMW19B	\$350.00	10:15 AM 1/1/99
123	ROBX12B	\$336.00	9:47 AM 1/1/99
123	JONEX84B	\$195.00	9:24 AM 1/1/99
123	SMIMW19B	\$150.00	9:12 AM 1/1/99
123	DOEQ29J	\$135.00	9:10 AM 1/1/99

FIG. 4

216

BIDDER ID 500	HISTORIC PARTICIPATION LEVEL 502	BIDDER NAME 504	FINANCIAL ACCOUNT IDENTIFIER 506	CONTACT INFORMATION 508
DOEQ29J	5	JOHN DOE	1234-1234-1234-1234	12 WILLOW ST. TOWN, STATE
ROBX12B	2	BOB ROBERTS	1111-1111-1111-1111	500 1ST AVE. CITY, STATE
MCDT98R	8	SUE McDONALD	9999-9999-9999-9999	222 PARK AVE. CITY, STATE
JONEX84B	3	TOM JONES	5555-5555-5555-5555	15 RIVER PL. TOWN, STATE
SM1MW19B	10	BILL SMITH	2222-2222-2222-2222	192 BARN RD. TOWN, STATE
MALWG01B	1	NEIL MALLONE	4444-4444-4444-4444	95 MAIN ST. TOWN, STATE
MARY202C	21	ANDREW MARTIN	3333-3333-3333-3333	5 PARK AVE. CITY, STATE
STEZD12K	6	STEVE JOHNSON	7777-7777-7777-7777	8 PROSPECT ST. TOWN, STATE

FIG. 5

218

AUCTION ID 600	REQUIRED CONDITIONS 602	OFFER MESSAGE 604	OFFER RECIPIENT RULES 606	REWARD ID 608
123	NO BIDS RECEIVED WITHIN 30 MINUTES	"MAKE THE NEXT BID AND WE'LL GIVE YOU A \$10 REBATE CREDITED TO YOUR FINANCIAL ACCOUNT"	ALL PARTICIPANTS IN CURRENT AUCTION DATABASE	28
123,124	HIGH BID < \$300.00 AFTER 3RD HOUR OF AUCTION	"MAKE THE NEXT BID AND WE'LL GIVE YOU \$15 TOWARDS THE NEXT BID THEREAFTER"	TOP 5 BIDDERS IN CURRENT AUCTION DATABASE	21
124	HIGH BID < \$450.00	"MAKE THE NEXT BID OVER \$500 AND WE'LL GIVE YOU A FREE CLOCK-RADIO"	FIRST BIDDER	26

FIG. 6

220

REWARD IDENTIFIER 700	REWARD SUPPLIER 702	REWARD DESCRIPTION 704	REWARD RULES 706
21	AUCTIONEER	\$15.00 TOWARD SUBSEQUENT BID	- AUCTIONED PRODUCT = PRODUCT X - BIDDER MUST EXCEED CURRENT HIGH BID
22	THIRD PARTY	\$50 TOWARDS OFFER	- AUCTIONED PRODUCT = PRODUCT Y - BIDDER MUST AGREE TO USE THIRD PARTY INSURER IF THEY ARE THE WINNING BIDDER
23	AUCTIONEER	WARRANTEE ON AUCTION PRODUCT	- AUCTIONED PRODUCT = PRODUCT Z - BIDDER MUST SUBMIT > 5 BIDS IN CURRENT AUCTION
24	AUCTIONEER	FREE DIGITAL WATCH	- AUCTIONED PRODUCT = PRODUCT B - BIDDER MUST HAVE SUBMITTED AT LEAST 3 BIDS THAT PROGRESSIVELY INCREASED BY 50%
25	AUCTIONEER	\$10.00 REBATE CREDITED TO FINANCIAL ACCOUNT	- BIDDER MUST HAVE RESPONDED TO HIGH BID WITH SUBSEQUENT BID WITHIN 2 MINUTES
26	AUCTIONEER	FREE CLOCK-RADIO	- BIDDER MUST HAVE BEEN THE FIRST BIDDER - WINNING BID MUST BE \geq \$500.00
27	AUCTIONEER	\$50.00 GIFT CERTIFICATE TO RESTAURANT A	- BIDDER MUST HAVE PARTICIPATED IN \geq 10 PREVIOUS AUCTIONS
28	AUCTIONEER	\$10.00 REBATE CREDITED TO FINANCIAL ACCOUNT	- BIDDER MUST EXCEED CURRENT HIGH BID - NO BID MUST HAVE BEEN PREVIOUSLY RECEIVED FOR 30 MINUTES AFTER THE PREVIOUS BID

FIG. 7

8 / 11

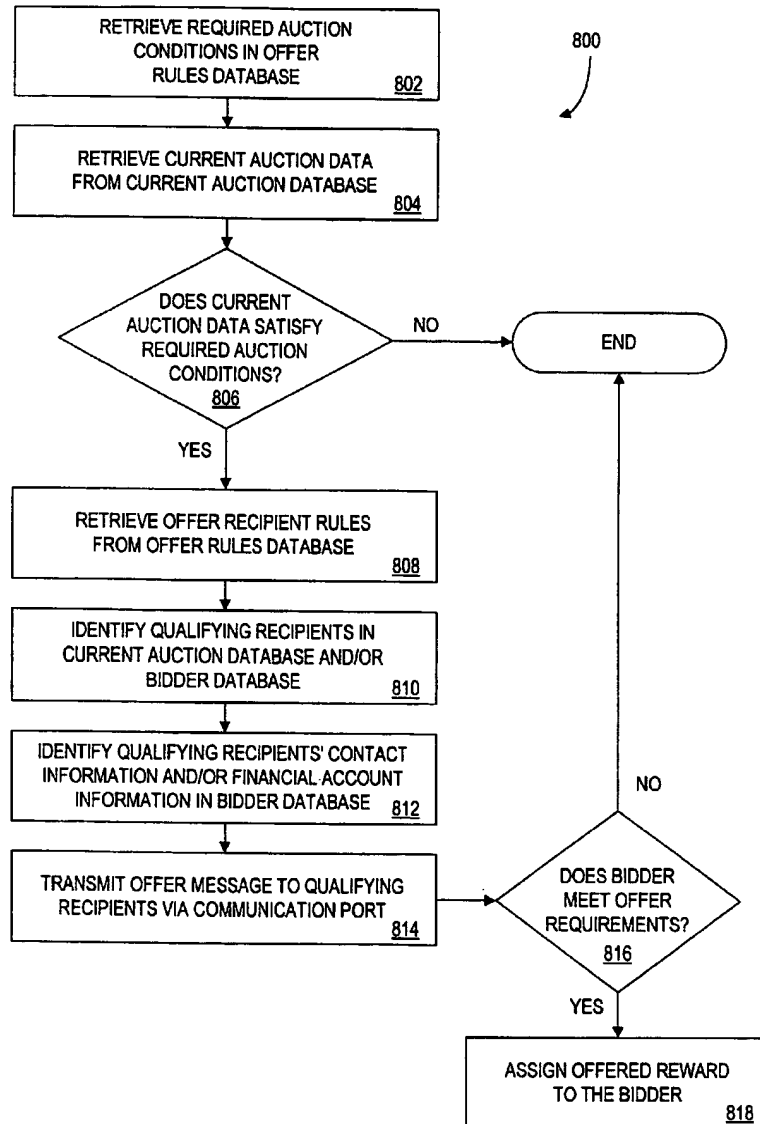


FIG. 8

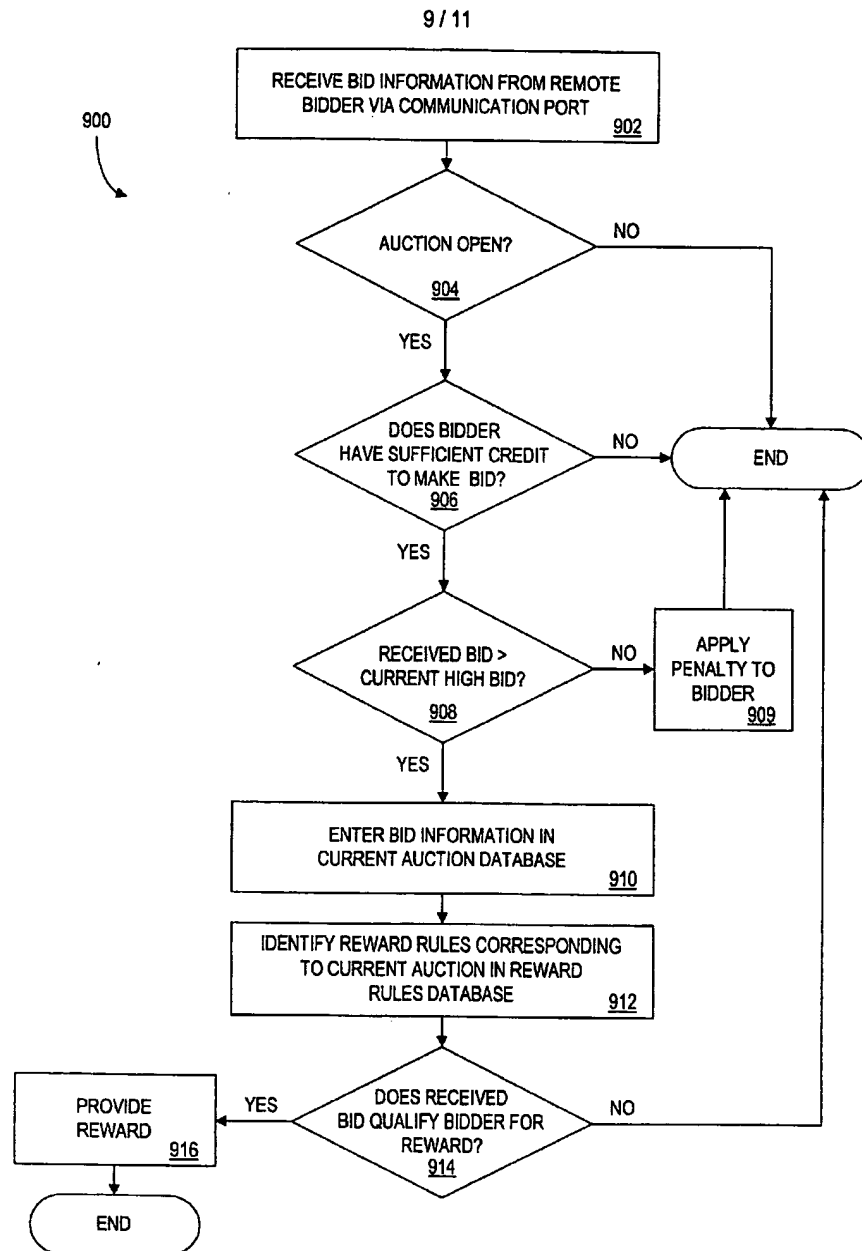


FIG. 9

10 / 11

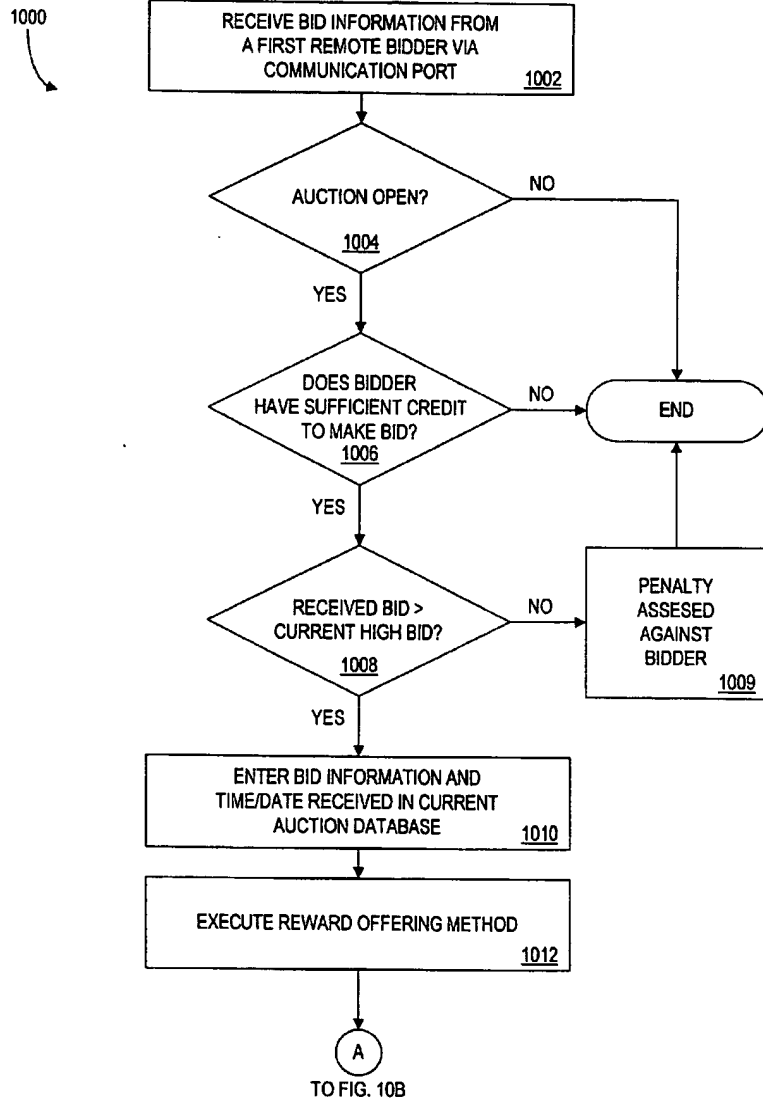


FIG. 10A

11 / 11

FROM FIG. 10A

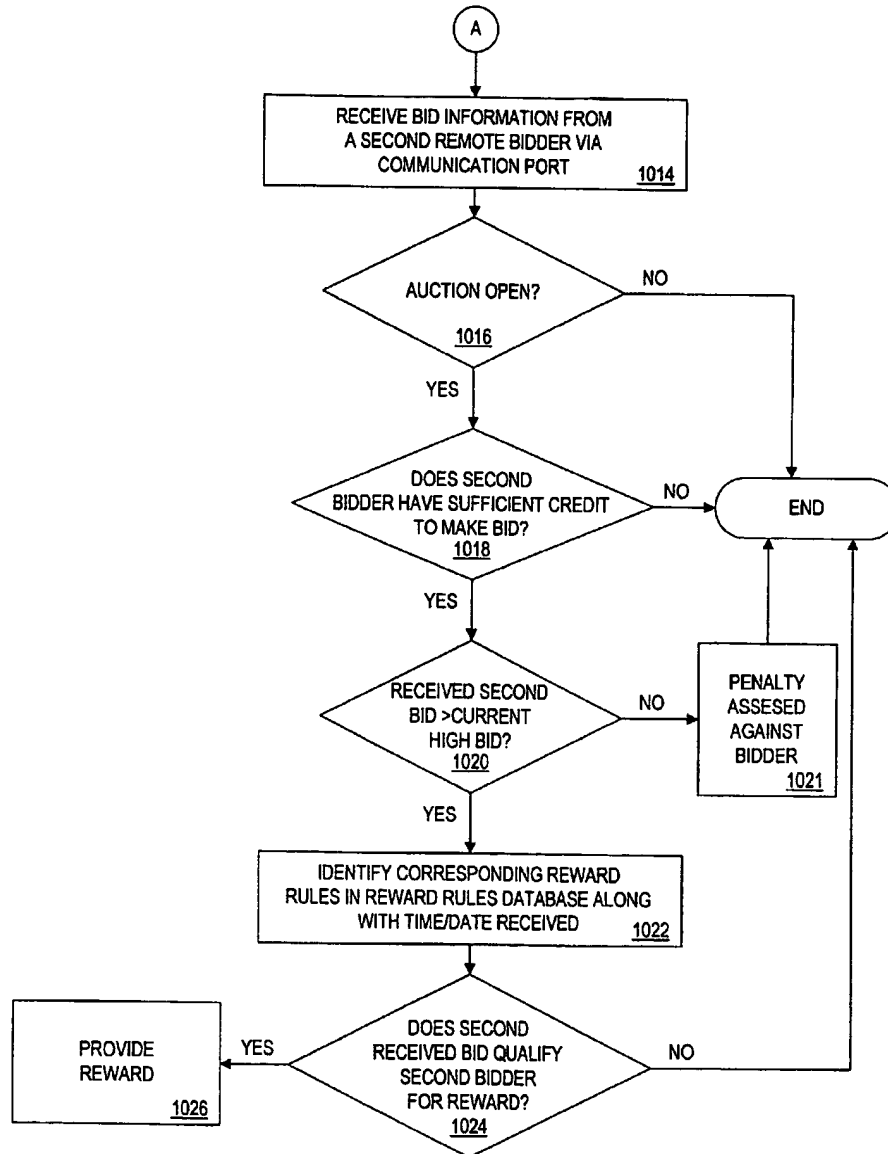


FIG. 10B

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 99/23901

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98 34187 A (GROEFTEHAUGE MARTIN ;AUTOCOM APS (DK); GROEFTEHAUGE PETER (DK)) 6 August 1998 (1998-08-06) abstract figure 1 page 5, line 1 -page 5, line 5 claim 9	1, 54, 61-63
A	WO 98 38562 A (FERGUSON HENRY ;FERGUSON CLAYTON T (US)) 3 September 1998 (1998-09-03) abstract page 7, line 20 -page 7, line 28 figure 1	1, 54, 61-63

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

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- "A" document member of the same patent family

Date of the actual completion of the international search

11 February 2000

Date of mailing of the international search report

28/02/2000

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INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US 99/23901

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KUMAR M ET AL.: "Internet Auctions" PROCEEDINGS OF THE 3RD USENIX WORKSHOP ON ELECTRONIC COMMERCE, 31 August 1998 (1998-08-31) - 3 September 1998 (1998-09-03), XP002130297 the whole document	1,50,54, 59-66

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/23901

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9834187 A	06-08-1998	DK 10797 A AU 5652298 A	30-01-1997 25-08-1998
WO 9838562 A	03-09-1998	US 5991736 A AU 6536298 A	23-11-1999 18-09-1998